



SOCIALRES

SWOT analyses for cooperatives, crowd-funding platforms and aggregators of renewable energies

Authors: Volker Kromrey, Annika Woltjen, Dimitri Vedel (LCF)



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N° 837758.

Acknowledgement

This report has been produced within the SocialRES project “Fostering socially innovative and inclusive strategies for empowering citizens in the renewable energy market of the future”.

WIP Renewable Energies coordinates the SocialRES project.

The consortium involves 13 partners in 9 European Countries. The logos of the partners cooperating in this project are shown below and information about them is available in this report and at the website: www.socialres.eu



This report has been written by Volker Kromrey, Annika Woltjen, Dimitri Vedel from Bodensee-Stiftung - Lake Constance Foundation. The authors thankfully acknowledge the valuable contributions from all project partners.

Disclaimer

This project has received funding from the European Union’s Horizon 2020 research and innovation programme under grant agreement No. 837758. The sole responsibility for the content of this report lies with the authors. It does not necessarily reflect the opinion of the European Union. Neither INEA nor the European Commission are responsible for any use that may be made of the information contained therein. While this publication has been prepared with care, the authors and their employers provide no warranty with regards to the content and shall not be liable for any direct, incidental or consequential damages that may result from the use of the information or the data contained therein. Reproduction is authorized providing the material is unabridged and the source is acknowledged.



This project has received funding from the European Union’s Horizon 2020 research and innovation programme under grant agreement N° 837758.



Contacts

Project coordinator

Silvia Caneva and Pablo Alonso
WIP - Renewable Energies
Sylvensteinstrasse 2, Munich, Germany

Email: silvia.caneva@wip-munich.de

Author(s)

Volker Kromrey, Annika Woltjen, Dimitri Vedel
Bodensee-Stiftung - Lake Constance Foundation
Fritz-Reichle-Ring 4, 78315 Radolfzell, Germany

Email : volker.kromrey@bodensee-stiftung.org

Co-Author(s)

None

Reviewer(s)

Silvia Caneva (WIP)



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N° 837758.



Technical references

Project Acronym	SocialRES
Project Title	Fostering socially innovative and inclusive strategies for empowering citizens in the renewable energy market of the future
Project Coordinator	Silvia Caneva WIP - Renewable Energies silvia.caneva@wip-munich.de
Project Duration	40 months (May 2019 - August 2022)

Deliverable No.	D 4.1 - SWOT analysis for all case studies, including the assessment of competitiveness through LCOE
Dissemination level*	PU
Work Package	WP 4 - Networking, co-creation and mutual learning
Task	T 4.1 - Engagement activities and formation of focus groups for new development
Lead beneficiary	LCF
Contributing beneficiary/ies	Bodensee Stiftung - Lake Constance Foundation (LCF), I-ENER, Energetica, GoParity, abundance, REGEA, Tractebel
Due date of deliverable	30.04.2020
Actual submission date	30.04.2020

* PU = Public

PP = Restricted to other programme participants (including the Commission Services)

RE = Restricted to a group specified by the consortium (including the Commission Services)

CO = Confidential, only for members of the consortium (including the Commission Services)

v	Date	Beneficiary	Author
1.0	20/04/2020	LCF	Volker Kromrey, Annika Woltjen, Dimitri Vedel
2.0	27/04/2020	WIP	Silvia Caneva
3.0	29/04/2020	WIP	Silvia Caneva



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N° 837758.



Table of contents

Technical references	4
Table of contents	5
Table of figures	6
Table of tables	7
Introduction	8
Description of the SocialRES case studies	10
SWOT Analyses	11
SWOT methodology	11
SWOT results	12
Most common strengths and weaknesses	12
Opportunities and threats.....	13
Matchmaking	18
Concept	18
Identification of common topics	18
Results	20
Conclusions	22



Table of figures

Figure 1: Step-by-step methodology of the SWOT analyses and matchmaking process. ...	9
Figure 2: Visualization of the SWOT-methodology.	11
Figure 3: Common strengths.	13
Figure 4: Common weaknesses.....	13
Figure 5: Technical fields of interest.	15
Figure 6: Identification of common topics.....	18
Figure 7: Step-by-step methodology followed during the matchmaking process.	19



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N° 837758.



Table of tables

Table 1: Opportunities and threats	14
Table 2: Matchmaking results - workshop topics and participants.	20



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N° 837758.



Introduction

SocialRES is a research and innovation project funded by the European Union with the aim of fostering energy democracy through social innovation and the active collaboration between cooperatives, aggregators of renewable energy and crowdfunding platforms.

This deliverable focuses on the SWOT analyses carried out for the SocialRES case studies and the related matchmaking activities. The case studies represent the cooperatives, aggregators of renewable energy and crowdfunding platform partners of the project.

In the frame of the task “engagement activities and formation of focus groups for new development”, all case study providers performed comprehensive and coordinated SWOT analysis workshops with their respective case studies. During those first meetings, focus group research structured the process. Focus group research is a type of research that involves bringing in a small group of subjects together and having them discuss a phenomenon of interest.

The focus groups evaluated themselves the status of their organisation using the SWOT analysis to reflect on the strength and weaknesses. This commonly used methodology is a first step to implement citizen science in the group and forms the base for new development (e.g. mobility, RES production, producer-consumer-unions and energy efficiency).

The SocialRES partners provided the results of the SWOT workshops as short reports and LCF, who is responsible for the task, processed and synthesized them. The information provided formed the basis for the matchmaking exercise in order to find the most suitable matching organizations and topics for the study visits and further mutual learning to be carried out during the SocialRES project.

The SWOT analysis is an important step for new development in the case studies. It helps the project partners to understand the structure and the needs of the different case studies and offers a base for the anticipated development of social innovations and new business models.

Based on the developed SWOT analyses, LCF performed a matchmaking exercise in order to link the organizations with common interests and complementary features. Linking either strengths with weaknesses of different organizations or common interests that are tackled in different ways.

The following flowchart gives an overview of the step-by-step methodology we have applied.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N° 837758.



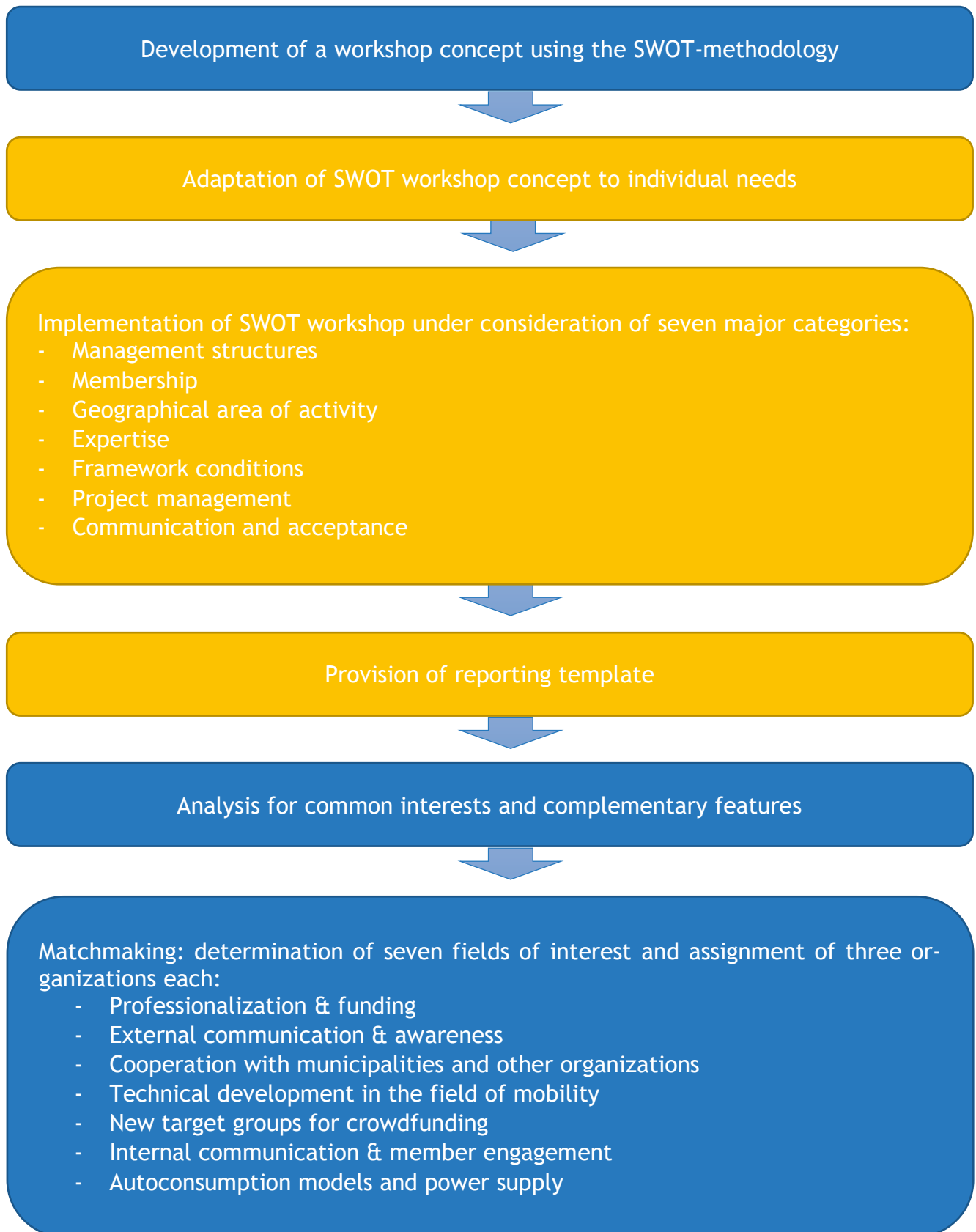


Figure 1: Step-by-step methodology of the SWOT analyses and matchmaking process.

Blue = LCF, yellow = Case Studies.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N° 837758.



Description of the SocialRES case studies

The SWOT analysis has been carried out for the following case studies of cooperatives, crowd-funding platforms and aggregator partners of the SocialRES project.

ABUNDANCE SWINDON COMMON FARM SOLAR

RES Crowdfunding Platform, UK

Abundance worked with Swindon Borough Council for interesting projects: to build and finance of a 4.8MW ground mounted solar park and the first Council low carbon project.

ENERGETICA

RES Cooperative, Spain

Energética S. Coop. is a consumer cooperative which counts more than 1100 members and 1300 electricity supply contracts. This cooperative owns 20% of a mini- hydroelectric power plant (1MW).

I-ENER

RES Cooperative, France

I-ENER is a citizen society focusing on the development of renewable energy projects, mainly the production of electricity and heat (e.g. photovoltaic, biomass, etc.), in the Basque country.

GOPARITY

ES Cooperative & RES Crowdfunding Platform, Portugal

The case study provided by Go Parity includes the case study of the Power Purchase Agreement (PPA) signed between the RES cooperative Cooperative Agrícola de Mangualde (CAM) and Coopernico, and the RES crowdfunding case study Peer to Peer (P2P) lending for the Lisbon Swedish School.

LAKE CONSTANCE FOUNDATION

RES Cooperatives, Germany

The case studies provided by Lake Constance Foundation include a cluster of German citizen energy cooperatives in Baden-Württemberg. Two examples of energy cooperatives are the Bioenergy Villages and Bürgerenergie Bodensee (Civil energy cooperatives at Lake Constance).

REGEA

RES Crowdfunding Platform, Croatia

Križevci Solar Roof: P2P crowdfunding investment model to finance an installation of a 30kW PV system on the rooftop of a business centre owned by the City of Krizevci (Croatia).

TRACTEBEL

RES Aggregation, Romania

The Romanian case study consist in the development of a virtual energy transaction platform designed to address the needs of the local community and improve energy transactions at the level of individual households.



SWOT Analyses

SWOT methodology

SWOT Analysis is a common and widespread methodology. As there is not one specific definition of the exact way how to perform a SWOT workshop in detail, LCF provided the case studies with a template and a description on how to perform their workshop and in what form the results should be delivered. This was necessary to ensure the consistency of the data and enabled further analysis and processing. The case studies had nevertheless the freedom to adapt the workshop format to their needs and circumstances.

The three aims of the exercise:

1. Analysis of the organization (case study) to define the initial position of the case study regarding social innovation, future perspectives, new business models.
2. Discussion of the analysis-results and setting priorities regarding the future development.
3. Creating a base for the matchmaking with other case studies.

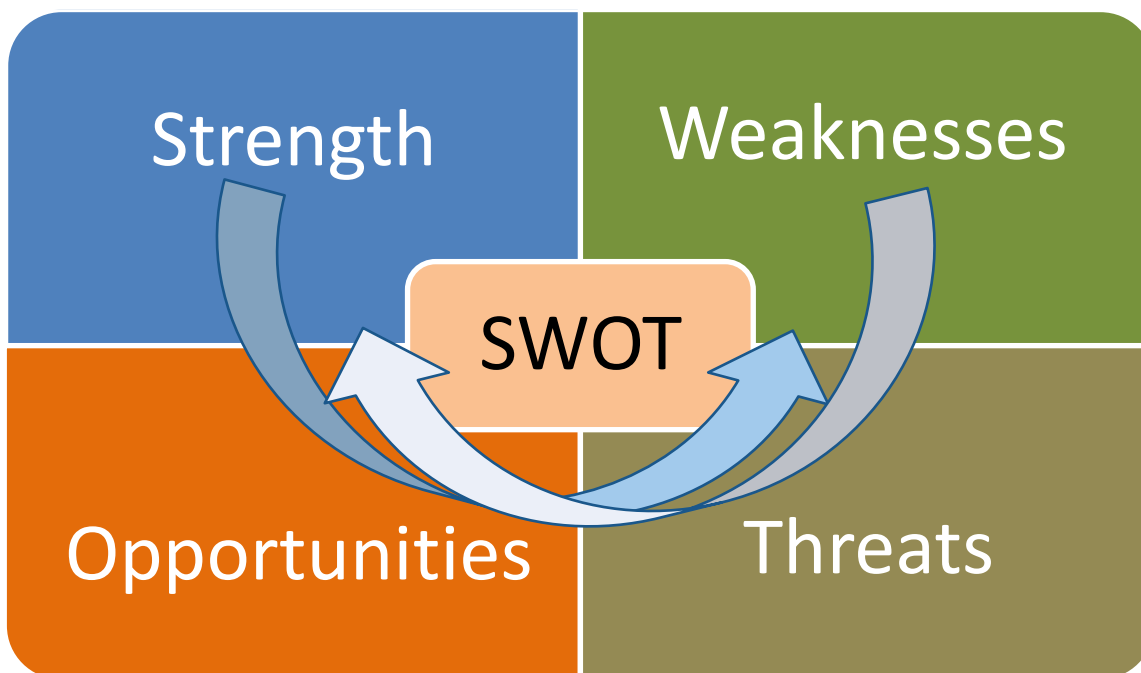


Figure 2: Visualization of the SWOT-methodology.

The Case studies were asked to consider the following issues when performing the SWOT:

- Management structures (e.g. volunteers, professionalization, time budget of staff, financial power)
- Membership (e.g. engagement, number, age, place of residence)



- Geographical area of activity
- Expertise in different fields of activities (e.g. mobility, RES production, prosumer-consumer union, energy efficiency)
- Framework conditions (e.g. political, legal, societal, technological, economic, environmental)
- Project management
- Communication and acceptance

Additionally, they should discuss the arrows by asking the following questions:

- ➔ Which strengths are endangered and how can they be preserved (defence)?
- ➔ How can you attack which weaknesses, which opportunities can you seize?

SWOT results

The case study providers performed workshops with different focus groups and came up with different SWOT analyses for nine organisations. Each case study provider carried out one SWOT for one organization except REGEA and LCF. REGEA performed different SWOTs for the cooperative and the crowd-lending platform they represent, but due to the personal union, we consider them as one organization in the following matchmaking exercise. LCF performed separate SWOT analyses for two different cooperatives (BEG Bodensee and BEG Biederbach). Being that the cooperatives BEG Bodensee and BEG Biederbach are two separate organizations with therefore different SWOT results (LCF as common case study provider and host to the study visit), we treated them separately in the matchmaking exercise.

The resulting eight SWOT analyses are the base for the matchmaking exercise and result in seven study visits and mutual learning workshops.

Most common strengths and weaknesses¹

There are several strengths and weaknesses, which occurred repeatedly. An overview is given in Figure 3 and Figure 4. Six out of eight case studies are professional organizations with permanent staff. In most of them, there is high technical expertise. While five case studies have a clear focus on regional development, three are geographically independent (in both cases identified as a strength). Communication, both internal and external, was named as a weakness by four case studies each, while three are good at this from their own point of view. Lack of trust or interest was named as a weakness by four organizations, whereas three are seeing their trustworthiness as a strength. Even though there is fair voluntary engagement in several case studies, five of them would like to improve here. Only two organizations stated that they have sufficient financial power and that they are satisfied with the diversity of members regarding age and gender. Acquisition of new projects was found troublesome by three organizations. Two case studies named cooperation with municipalities as a strength, while one is finding this difficult.

¹ Please note that all strengths and weaknesses are based on a subjective perspective.



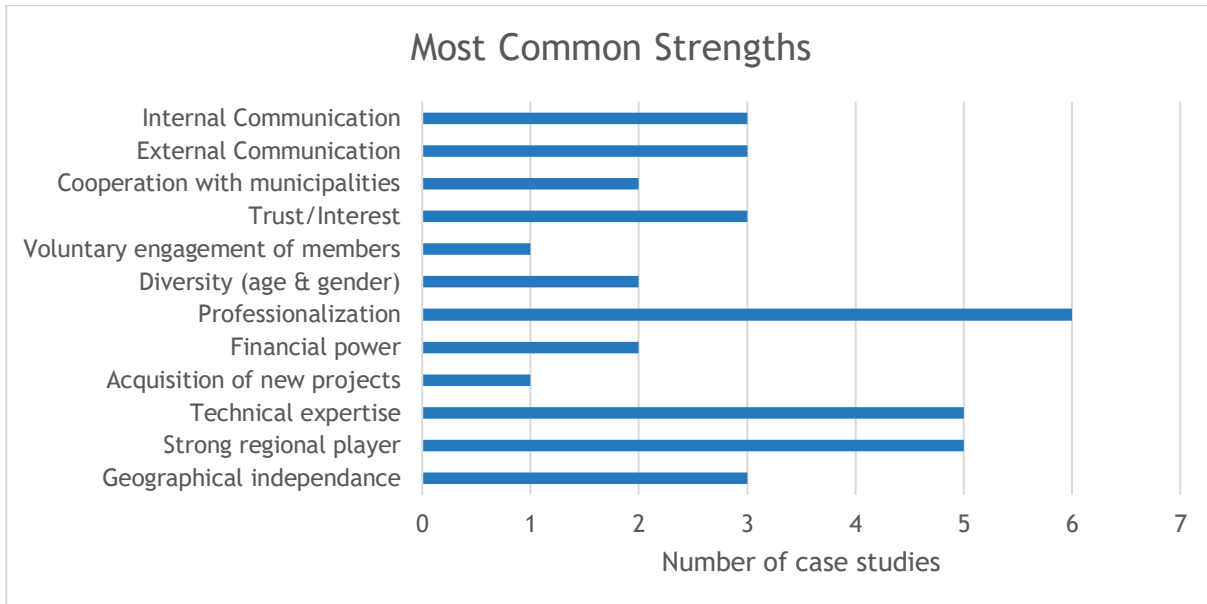


Figure 3: Common strengths.

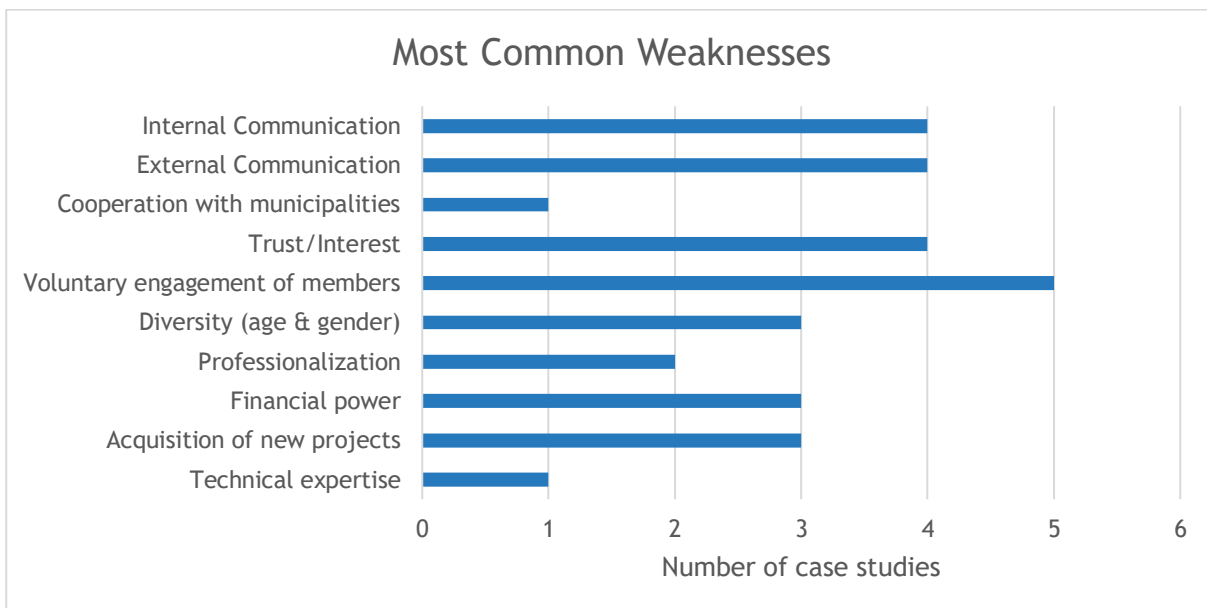


Figure 4: Common weaknesses.

Opportunities and threats

During the SWOT-workshops, the case studies encountered a variety of opportunities and threats. The selection of meaningful descriptions is listed in Table 1. The selected opportunities and threats are not common for all case studies, but were mentioned in some of the SWOTs.



Table 1: Opportunities and threats

SWOT-category	Opportunity	Threat
Management structures	<ul style="list-style-type: none"> Acquisition of EU or governmental funding Employment of permanent staff Voluntary engagement by members 	<ul style="list-style-type: none"> Lack of financial resources Dependence on few (voluntary) key persons Lack of time Devils circle: no projects - no money for staff who could develop projects
Membership	<ul style="list-style-type: none"> Becoming more attractive for young/female members In the long run, young members with small financial power will become more wealthy 	<ul style="list-style-type: none"> Lack of young/female members Long waiting list due to lack of projects Little financial power of members Little engagement Lack of idealism
Geographical area of activity	<ul style="list-style-type: none"> Expansion to new areas Worldwide application of business model 	<ul style="list-style-type: none"> Lack of new projects due to geographical limitations Lack of trust due to expansion to new areas
Expertise	<ul style="list-style-type: none"> Participation in research and development projects Making use of available expertise to enter new fields of activity 	<ul style="list-style-type: none"> Lack of expertise / hiring external experts is costly
Framework conditions	<ul style="list-style-type: none"> Plenty of wind or sunshine Influencing legislation Public interest in renewable energy (Fridays for Future) 	<ul style="list-style-type: none"> Lack of wind or sunshine Restrictive legislation Small remuneration for renewable energy Competition with large-scale enterprises
Project management	<ul style="list-style-type: none"> Cooperation with municipalities and other organizations Development of new business models Making use of synergies regarding renewable energy and biodiversity 	<ul style="list-style-type: none"> Lack of new projects can ruin organizations in the long run Salaried project developer may not succeed in generating new projects Negative impact of renewable energy on biodiversity
Communication and acceptance	<ul style="list-style-type: none"> Enforcement of regular communication with members Creation of awareness in the general public 	<ul style="list-style-type: none"> Lack of trust Little knowledge about the organization due to lack of internal communication Lack of awareness in the general public



In terms of technical development, the case studies named several fields of interest that they would like to evolve further. Among them were energy consultation, energy efficiency, autoconsumption & power supply, mobility, heat, hydropower, PV and wind. An overview is given in Figure 5.

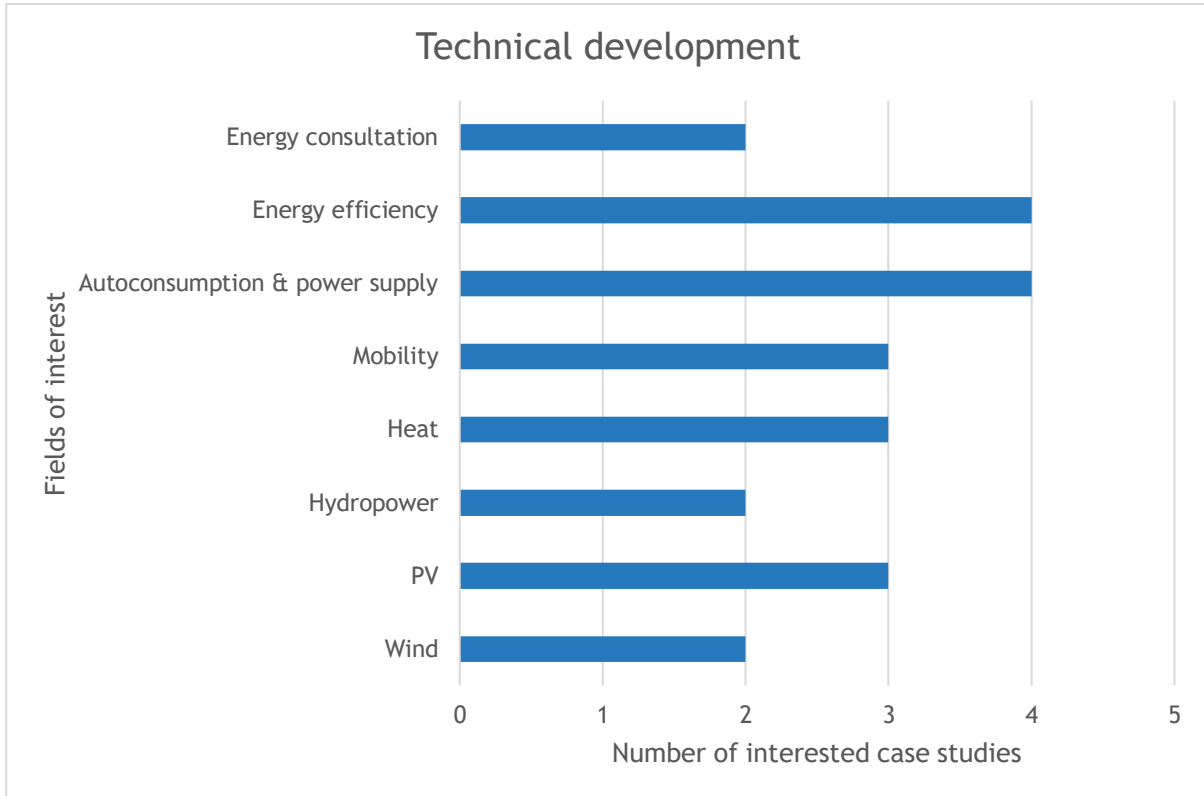


Figure 5: Technical fields of interest.



Impressions of the different workshops performed:



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N° 837758.





This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N° 837758.



Matchmaking

Concept

Linking the different organizations with each other based on common interests or complementary features is a necessary step in order to maximise the effect of mutual learning activities. In order to avoid unnecessary traveling and to create a good working atmosphere in the workshops, we strived to form groups of three organizations and a single topic for each study visit.

To achieve this, we followed a step-by-step methodology described in the decision tree below (see Figure 7).

Identification of common topics

Taking into account the results of the SWOTs and applying the decision tree methodology, we were able to define seven different workshop topics with three organizations at a time. Those workshops will take place within the next one and a half years with the different case studies taking turn at being the host of the study visits. LCF will attend all of the study visits and facilitate the workshops in order to provide the necessary structure for ideal mutual learning experiences.

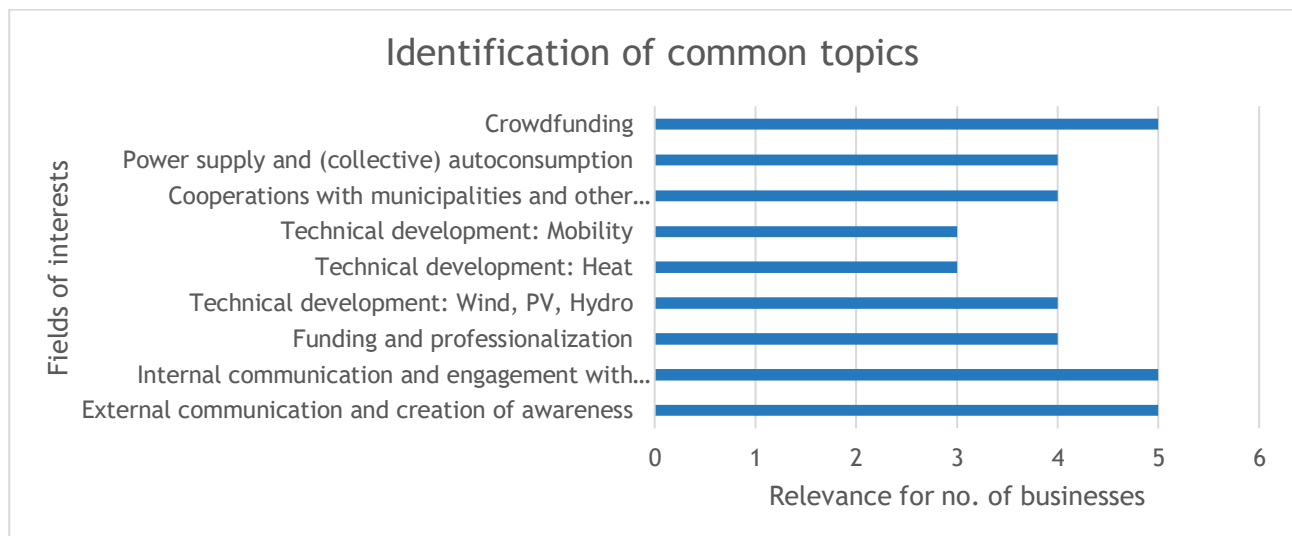


Figure 6: Identification of common topics.

The selected seven topics (see Figure 7) provide ideal possibilities of exchange between the different case studies. LCF and I-Ener are mentioned twice in brackets in the decision tree. Those are optional participations as a fourth case study in the study visits, that we strongly recommend. This taken into account all case studies will have the possibility of exchange with all other case studies, except GoParity and Energetica as well as Abundance and I-Ener, which will not meet within a study visit.

We have identified some more topics of interest, e.g. trust and some technical topics. Those topics might be discussed in the course of webinars or bilateral meetings.



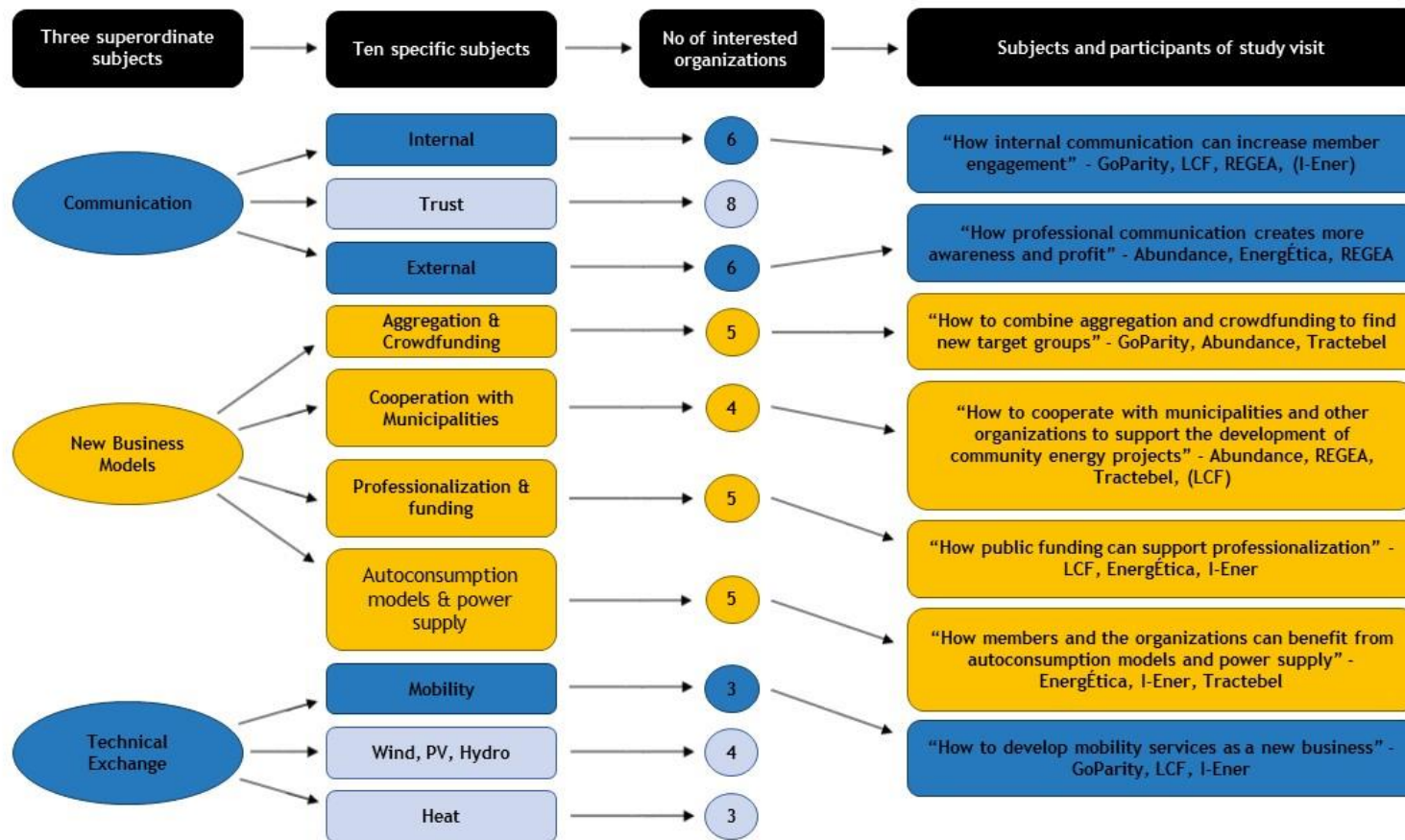


Figure 7: Step-by-step methodology followed during the matchmaking process.

This project has received funding from the European Union’s Horizon 2020 research and innovation programme under grant agreement N° 837758.

Results

The workshop topics are the following:

Table 2: Matchmaking results - workshop topics and participants.

No	Workshop title	Description of Workshop	Case Studies	Host	Time
1	How public funding can support professionalization	This Workshop is about challenges and solutions in terms of financing permanent staff of socially innovative businesses in the energy sector. Funding from EU-projects or governmental institutions can support the professionalization and offer an opportunity to co-finance employees.	LCF, Energetica, I-Ener	LCF	Jul/Aug 2020 To be confirmed or postponed according to the measures to be implemented due to the coronavirus pandemic.
2	How professional communication creates more awareness and profit	This Workshop is about how to present a socially innovative business of the energy sector in the general public. The goal is to create awareness for renewable energy by using different communication channels or organizing public events. A special focus lies on the involvement of young people and women.	Abundance, Energetica, Regea	Regea	Sept/Oct 2020 To be confirmed or postponed according to the measures to be implemented due to the coronavirus pandemic.
3	How to cooperate with municipalities and other organisations to support the development of community energy projects	This Workshop is about cooperating with municipalities in terms of renewable energy project development and financing. It will be discussed how to raise interest in municipalities and what they need for a successful collaboration. Another subject of the workshop will be cooperation between socially innovative businesses of the energy sector.	Abundance, Regea, Tractebel, (LCF)	Abundance	Nov/Dec 2020

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N° 837758.

4	How to develop mobility services as a new business	This Workshop is about developing new mobility concepts and has a strong focus on technical subjects. This involves car sharing, charging points for electric cars, usage of mobile applications etc. The aim will be mutual exchange and inspiration to develop new business models.	GoParity, LCF, I-Ener	I-Ener	Jan/Feb 2021
5	How to combine aggregation and crowdfunding to find new target groups	This Workshop is about finding ways to combine aggregation and crowdfunding and about how this can be of use to address specific new target groups. There will be room for sharing experiences and developing new business models based on the crowdfunding-aggregation idea.	GoParity, Abundance, Tractebel	Tractebel	Mar/Apr 2021
6	How internal communication can increase member engagement	This Workshop is about the values of professional internal communication and about how businesses can benefit from (voluntary) engagement of their members. Topics will be the usage of communication channels, creation of a communication plan and defining low-threshold tasks for active members. A special focus lies on how to cause enthusiasm in young people and women.	GoParity, LCF, Regea, (I-Ener)	GoParity	May/June 2021
7	How members and the organisations can benefit from auto-consumption models and power supply	This Workshop is about supplying power to members of socially innovative businesses in the energy sector. Subjects will be the further development of fields of action and the strategical adaptation to possible new legislation. It will also involve the technical components of a virtual power platform such as (collective) autoconsumption, storage systems and smart metering.	Energetica, I-Ener, Tractebel	Energetica	Postponed due to Corona pandemic

Conclusions

Performing the SWOT workshops provided a good base for the mutual learning and offered a better understanding of the participating case studies. The structured process allowed a comprehensible selection of topics and matches for the study visits, being a central element of the mutual learning experience.

Additionally, the feedback from the case studies after performing the SWOT workshops was very positive. They found it enriching and a great way to critically evaluate and assess success factors. The workshops were a good possibility for engaging members and volunteers, and they provided a framework for team members to flag thoughts they had while developing their area of the product and drive consensus in the team. The mix of administrative staff, members, stakeholders and volunteers gave extra benefit to the outcomes.

